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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : H01L 31/042, 31/052, 31/05	A3	(11) International Publication Number: WO 00/38216 (43) International Publication Date: 29 June 2000 (29.06.00)
(21) International Application Number: PCT/US99/29428 (22) International Filing Date: 10 December 1999 (10.12.99) (30) Priority Data: 60/111,899 10 December 1998 (10.12.98) US (71) Applicant: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 1111 Franklin Street, Oakland, CA 94607-5200 (US). (72) Inventors: HAIGH, Ronald, E.; 10813 West 85th Avenue, Arvada, CO 80005 (US). WOJTCZUK, Steve; Apartment 5K, 205 Walden Street, Cambridge, MA 02140 (US). JACOBSON, Gerard, F.; 812 Mayview Way, Livermore, CA 94550 (US). HAGANS, Karla, G.; 4186 Milton Way, Livermore, CA 94550 (US). (74) Agent: THOMPSON, Alan, H.; P.O. Box 808, Livermore, CA 94551 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 9 November 2000 (09.11.00)
(54) Title: HIGH VOLTAGE PHOTOVOLTAIC POWER CONVERTER		
<div data-bbox="397 1165 1266 1323"></div> <p>(57) Abstract</p> <p>An array of independently connected photovoltaic cells on a semi-insulating substrate contains reflective coatings between the cells to enhance efficiency. A uniform, flat top laser beam profile is illuminated upon the array to produce electrical current having high voltage. An essentially wireless system includes a laser energy source being fed through optic fiber and cast upon the photovoltaic cell array to prevent stray electrical signals prior to use of the current from the array. Direct bandgap, single crystal semiconductor materials, such as GaAs, are commonly used in the array. Useful applications of the system include locations where high voltages are provided to confined spaces such as in explosive detonation, accelerators, photo cathodes and medical appliances.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/29428

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H01L31/042 H01L31/052 H01L31/05

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 779 660 A (SPECTROLAB INC) 18 June 1997 (1997-06-18) column 4, line 31 -column 8, line 42; claims 1,2; figures 2-4,6	1-3,5,8, 11,12, 15,17-22
Y		29,30, 32-34, 39-44, 48,49, 52,54
A		23-25, 27,29, 30, 38-43, 48-50, 52,53
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Date of the actual completion of the international search

10 August 2000

Date of mailing of the international search report

23/08/2000

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PCT/US 99/29428

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 016, no. 354 (E-1242), 30 July 1992 (1992-07-30) & JP 04 109882 A (TOYOTA CENTRAL RES & DEV LAB INC;OTHERS: 01), 10 April 1992 (1992-04-10) abstract ---	29,30, 32-34, 39-44, 48,49, 52,54
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Information on patent family members

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